THE ROAD TO SITE CLOSEOUT

"We are at the beginning of the end of our cleanup program."
—Sherri W. Goodman, Deputy Under Secretary of Defense (Environmental Security)

After more than a decade of effort and billions of dollars of expenditures, the Defense Department's environmental cleanup program is moving with increasing rapidity toward Site Closeout at a majority of its installations and sites. The initial focus of the program was on finding the sites with problems (site identification), deciding how best to handle cleanup at these sites (remedy selection), determining which sites to clean up first (risk-based prioritization), and beginning the cleanup process (remediation design and beginning construction). Today the Department's progress can be measured by the number of Remedies in Place (RIP) and the number of sites categorized as Response Complete (RC), which indicate that sites are reaching the last milestones in the often lengthy cleanup process. The phrase "road to Site Closeout" highlights DoD's objective of completing the cleanup program.

As of the end of fiscal year 1997 (FY97), 580 of the 27,454 sites that were identified as needing cleanup had achieved RIP status, and 15,265 sites had reached the RC milestone. Some stage of cleanup is in progress at the remaining 12,189 sites.

In this report, the term "site" is used to identify any area on a Defense Department installation or former DoD property where cleanup actions are under way or where the possibility of contamination is being investigated. In most instances, there will be several sites on a military installation or property.

The previous section provided background information on the various cleanup programs, their funding sources, and the legislative authority required for their implementation. This section identifies the process by which sites are investigated and cleanup mechanisms are put in place. All stages in this process guide response actions toward eventual Site Closeout.

Sites identified at any operational installation or any installation selected for closure or realignment under BRAC legislation must be managed in accordance with certain procedures prescribed by environmental laws and DoD policy. When a new site is discovered, it enters an investigation phase and is evaluated to determine the extent and significance of contamination. If no problem is found, the site requires no further action and is categorized as Response Complete. If cleanup is warranted, potential remediation options are developed and evaluated. The cleanup process at a site begins after the remedy has been selected and cleanup objectives have been determined. After RC has been achieved, long-term monitoring (LTM) and a 5-year review may be required to confirm that Site Closeout is possible. Figures 2a and 2b show the process described above.

Figure 2a
Concept-Level View of the Cleanup Process for Sites at Operational and BRAC Installations

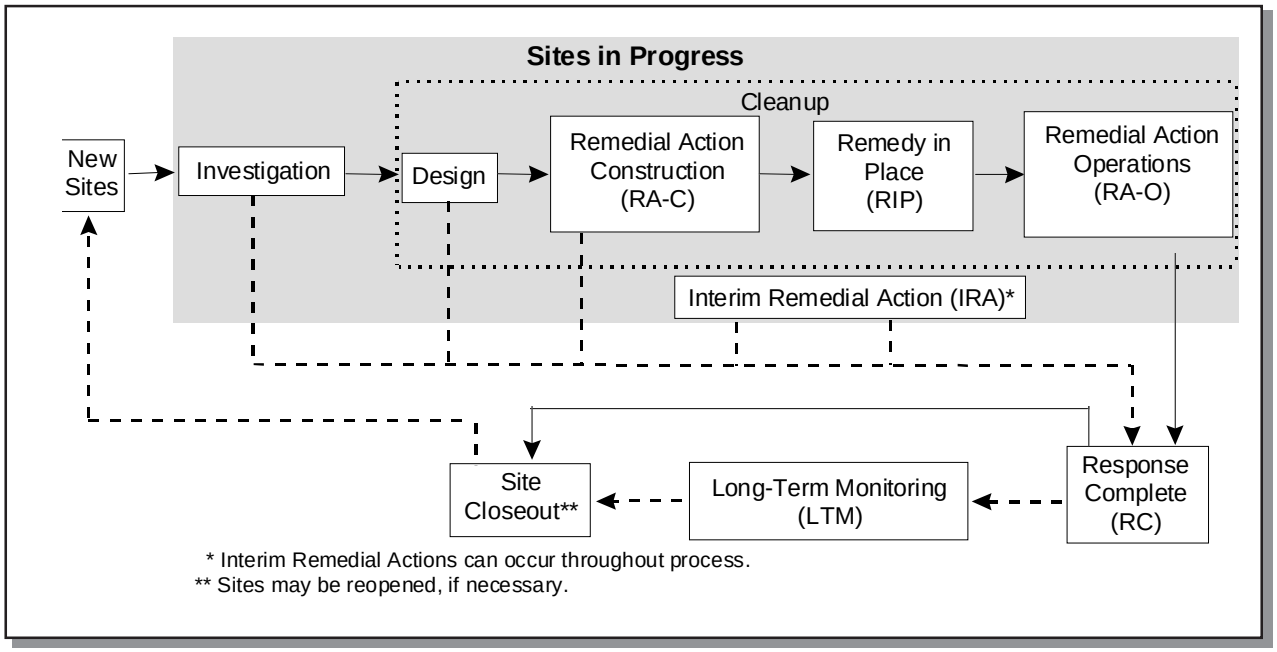
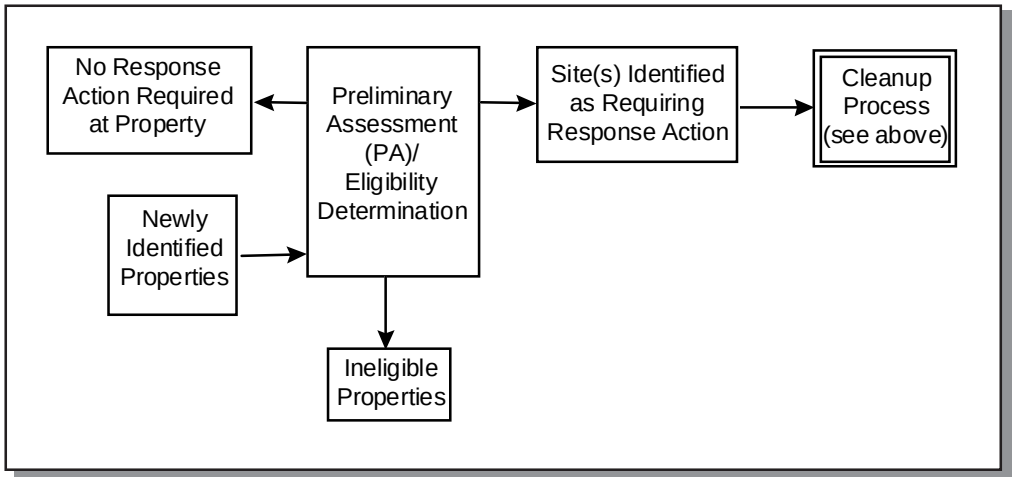


Figure 2b
Cleanup Process for FUDS Properties



Sites in the investigation phase or cleanup phase are considered "in progress," a term that is used frequently throughout this report. Only when all cleanup and monitoring activities are complete and DoD receives regulator approval can a site be officially closed out. The total number of sites may fluctuate as new sites are identified, closed sites are reopened, and existing sites are determined to require no additional action.

The restoration program at FUDS is similar to that at DoD's operational (active) and BRAC installations. FUDS consist of real property that was formerly owned by, leased to, used by, or otherwise under the operational control of DoD. Information concerning land and transfer, current ownership, and the origin of contamination must be evaluated to determine whether a site is eligible for DoD funding. During the Preliminary Assessment (PA) phase, an inventory is taken to determine whether the property is eligible for Environmental Restoration (ER) funds and whether there is any contamination. If the property is eligible for funding and a further response is required, the identified site or sites begin the standard restoration process (see Figure 2b).

Cleanup Program in Action

Olmsted Air Force Base

The former Olmsted Air Force Base in Harrisburg, Pennsylvania, was used by DoD for engine and aircraft testing, as a warehouse and supply site, and for general base operations and maintenance activities for almost 50 years.

In 1983, the Pennsylvania Department of Environmental Resources discovered groundwater contamination at the old Air Force Base. As with all properties once owned by the Defense Department, cleanup of the area fell to the U.S. Army Corps of Engineers (USACE). An additional challenge was created by the placement of Olmsted on the National Priorities List (NPL) in 1986.

USACE began cleanup activities shortly after it was given cleanup responsibility in 1992 under the FUDS program. Remedies included installation of a U.S. Environmental Protection Agency-required water treatment system for contaminated groundwater. In addition, USACE removed 15 underground storage tanks and 15 electric transformers and associated contaminated soil and demolished almost 10,000 feet of underground fuel pipeline.

In June 1997 the property, now owned by the Pennsylvania Department of Transportation and known as Middletown Airfield, was officially delisted from the NPL. The removal of the site from the NPL was the result of a productive partnering process that found ways to safely accelerate the cleanup.

900 BY THE YEAR 2000 INITIATIVE

In his 1997 State of the Union address, President Clinton expressed his support for his Administration's effort to accelerate the pace of environmental restoration activities nationwide. The President set a goal for cleanup at the 1,205 identified Superfund sites (i.e., sites on the National Priorities List, or NPL), challenging federal agencies (e.g., EPA, DoD, and the Department of Energy) to complete construction of cleanup remedies at 500 more NPL sites by the year 2000. Accomplishment of this goal would bring the total number of sites in the construction complete category to 900.

EPA's construction complete category includes sites where the physical construction of the cleanup remedy has been finished, all immediate threats have been addressed, and all long-term threats are under control.

DoD is responsible for cleanup action at 146 of the 1,205 NPL sites. The Army has one installation on the Construction Complete List (Riverbank Army Ammunition Plant) and has scheduled two more installations for inclusion on the list in FY98. The Defense Logistics Agency (DLA) submitted four installations as candidates for the list in FY97. DoD estimates that 28 installations will be eligible for the Construction Completion List by the end of FY99 and that 42 installations will be eligible for the list by the end of FY00.

Cleanup Program in Action

Riverbank Army Ammunition Plant

The Army is working hard to support the President's Superfund 900 challenge. In September 1997, Riverbank Army Ammunition Plant in central California became the first DoD NPL installation to be placed on EPA's NPL Construction Complete List. Construction complete indicates that physical construction of all cleanup activities is finished, all immediate threats have been addressed, and all long-term threats are under control. Working to reach this milestone shows DoD's commitment to supporting the President's initiative and to expediting remediation as much as possible.

Riverbank was placed on the NPL in 1990. Four years later, Riverbank became the first DoD NPL installation to complete all environmental cleanup studies and sign a final Record of Decision for all sites. The Record of Decision documents selection of a cost-effective remedy for the sites. Once the cleanup remedy was selected, construction of the remedy began, leading to the actual restoration of the sites.

Riverbank is the first of several Army NPL installations scheduled to achieve construction complete status before the year 2000. The next installation in line for construction complete status is Schofield Army Barracks in Hawaii. The Army estimates that the Schofield Barracks will reach this goal by February 1998 and will be considered by EPA for NPL delisting by June 1998. The Army also has requested construction complete status for a former landfill at Fort Dix in New Jersey. The landfill is the only site at Fort Dix on the NPL. These significant cleanup milestones achieved by the Army are bringing the President's Superfund 900 goal one step closer to becoming reality.